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Examiner Criticism of Loans

An important purpose of our sample survey of the bank examination records of the Federal Reserve banks of New York, Philadelphia, and Atlanta was to secure data on the risks involved in bank lending to small business. The results most relevant to that particular issue are included in a forthcoming National Bureau report, "Risks and Returns in Small-Business Financing," by Geoffrey H. Moore, Thomas R. Atkinson, and Edward J. Kilberg. This report, which was commissioned by the Board of Governors of the Federal Reserve System as part of the study of small business financing requested by the United States Congress in 1957, was published in preliminary form (not yet including the bank examination survey results), together with other parts of the Federal Reserve study, as a Committee Print of the 85th Congress.[1]

In compiling the bank examination data, a great deal of information was also obtained that was relevant not merely to bank lending to small business but to lending risks, experience, and standards for business loans in general. It is some of these broader findings that are reported here.

The National Bureau survey covered a sample of sixty state member banks, consisting of twenty banks in each of the New York, Philadelphia, and Atlanta Federal Reserve Districts. The sample includes a broad cross section of banks, ranging from small rural institutions to New York City giants. It cannot, however, be taken to represent the universe of all state member banks in these areas, mainly because banks with deposits of less than $25 million are substantially underrepresented.

[1] *Financing Small Business: Report to the Committees on Banking and Currency and the Select Committees on Small Business by the Federal Reserve System,* Parts 1 and 2, 85th Congress, 2nd Session, Washington, 1958.

The Quality of Bank Loans

Attention was concentrated on the detailed records of the annual examinations of loan portfolios for 1957 (the latest year for which data were available at the time of the survey), but summary records for the preceding years back to 1947 were also tabulated. Because of the massive nature of the detailed records, which included data for thousands of individual borrowers and loans, additional sampling procedures had to be employed. These and other technical matters relating to sampling and tabulating procedures may be found in the Appendix.

The Examination Process

Each Federal Reserve bank is responsible for the examination of the state-chartered member banks in its district. (National banks are examined by the Comptroller of the Currency; state nonmember insured banks by the Federal Deposit Insurance Corporation.) Every state member bank is visited by the examiners once a year without prior notice. The examiners ascertain the *solvency* of the bank—that proper provision has been made for bad debts, that capital is unimpaired, that the condition of the bank is properly shown on the books and statements. They satisfy themselves that the business is conducted according to law. They investigate the character and competence of the bank management and require the correction of unsafe and unsound tendencies and policies.

A major part of the examination procedure is a close inspection of each bank's loan and investment portfolio. The individual credit files are scrutinized for all loans that exceed a usually quite low "cut-off" point selected primarily on the basis of the bank's size.[2] In this process, the principal information in each file, including balance-sheet summaries where available, is copied by the examiners and becomes part of the confidential record of the examination. Moreover, these "loan cards" contain space for several years of data and are updated at each examination (provided, of course, that the loan is still on the books),

[2] No records were available giving the actual cut-offs used for particular banks. The cut-offs are designed so that a preponderance of the total dollar volume of loans outstanding will be individually examined. Except for very large banks with deposits over $100 million, they appeared to be generally on the order of $4,000 or less for unsecured loans, and somewhat higher for secured loans. For the giant banks, they ranged apparently as high as a quarter of a million dollars or thereabouts.

so that a card may contain a historical record of a particular loan or borrower going back as far as five years.

Whenever an examiner concludes that a given loan involves undue risk, he "classifies" (that is, criticizes) it as either "substandard," "doubtful," or "loss." Examiners are instructed to criticize loans under the following circumstances: A loan or portion thereof is to be rated "loss," and promptly charged off, should the examiner conclude that it is "uncollectible." A loan or part thereof is rated "doubtful" if "a substantial loss is probable but not definitely ascertainable in amount." A loan is rated "substandard" if it "involves more than a normal risk due to the financial condition or unfavorable record of the obligor, insufficiency of security, or other factors noted in the examiner's comments. These assets should be given special and corrective attention, for example, by obtaining suitable reductions in amount, additional security, more complete financial data concerning obligor's condition, or other action as specific circumstances may require."[3]

The incidence of examiner criticism in the period since World War II has been low but not insignificant. For 1939-51 aggregate data for total loans (business and otherwise) rated substandard by examiners were published by the FDIC for all insured commercial banks. As shown in Table 1, the percentage of the total dollar volume of all loans that was rated substandard declined sharply between 1939 and 1945, and ranged between roughly 0.75 and 1.25 per cent for the remainder of the period.[4]

Time series for criticized loans, similar to the FDIC series, were compiled for the banks in the Bank Examination Survey for 1947-57 (Table 1). The incidence of substandard loans for 1947-51, the years for which the two series overlap, is fairly similar. The direction of change in the incidence of criticism is the same for every year, but the amplitude of the fluctuations in the survey data is greater. For 1952-57,

[3] *Monetary Policy and the Management of the Public Debt* (commonly referred to as the *Patman Hearings*), 82nd Congress, 2nd Session, Joint Committee on the Economic Report, Washington, 1952, Reply by the Chairman of the Board of Governors of the Federal Reserve System, p. 614. The above definitions have been in force since July 15, 1949, for all the federal bank supervisory agencies.

[4] For 1934-40, data were published only for insured nonmember banks, which constitute a relatively small part of the banking universe in terms of dollar totals for deposits and loans. These figures show a steady and sharp decline for the entire period covered.

TABLE 1

INCIDENCE OF CRITICIZED LOANS, 1939-57
(percentage, based on dollar volume)

	FDIC, All Insured Commercial Banks[a]	*Bank Examination Survey, Sixty Banks*[b]		
	Substandard Loans		All Criticized Loans	Criticized Business Loans[c]
1939	7.73			
1940	6.23			
1941	4.36			
1942	3.83			
1943	2.96			
1944	1.84			
1945	1.23			
1946	n.a.			
1947	1.28	1.27	1.42	
1948	1.35	1.87	2.12	
1949	1.26	1.63	1.95	
1950	0.99	1.04	1.33	
1951	0.73	0.55	0.79	
1952		0.73	1.00	
1953		0.93	1.23	1.70
1954		0.87	1.14	1.72
1955		1.06	1.26	2.30
1956		0.90	1.16	2.10
1957		0.78	0.95	1.74

n.a.=not available.

[a] Total substandard loans as a percentage of "appraised value," which is equal to book value less examiners' deductions (total value of loans classified "loss," half of value of loans classified "doubtful"). Book value of total and substandard loans is net of valuation reserves. As a result, data from 1947 on, when valuation reserves began to rise rapidly because of a change in tax treatment, are not fully comparable with earlier data. Taken from annual reports of the FDIC.

[b] For 1947-51, these banks held 8 per cent of the criticized loans of all insured commercial banks. (No later data for aggregate criticized loans are available.) Losses for these banks during 1948-51 (1947 aggregate data not available) were 7 per cent of the national total for insured commercial banks.

[c] Total business loans were obtained from the call reports closest to the examination dates in each year. For 1957, the loan volume at the examination dates was also estimated by sampling directly the examiners' reports on individual loans; the difference between the two results was only $46 million out of an aggregate volume of about $3.25 billion.

the survey data place the incidence of substandard loans at around 0.75 to 1 per cent of total loans.

The bank examination data were also used to develop estimates for criticized *business* loans for 1953-57; no prior statistics on this subject are available. The criticism rates for business loans for these years ranged from $1.70 per $100 of loans in 1953 to $2.30 in 1955. While these rates are uniformly higher than those based on total loans, this is largely due to technical factors. Thus, consumer loans, which for many banks add up to an important part of the total loan portfolio, are generally small in size and not subject to individual evaluation by the examiners, while security loans, also important in many banks, are not apt to draw criticism unless there has been a departure from the standard types of collateral or loan agreements. In fact, our data indicate that 95 per cent or more of all criticized loans are business loans.

In the three districts covered by the study, the bulk of criticized loans—approximately 80 per cent, both in terms of numbers of loans and loan amounts—is classified substandard; of the remaining 20 per cent, more than half is classified loss. The percentage of total loan volume classified doubtful or loss is thus very small.

These statistics are presented at this stage to provide some perspective on the magnitudes under discussion; they will be analyzed more fully in Chapter 4.

Meaning of Examiner Criticism

The formal definitions of the terms "substandard," "doubtful," and "loss" do not provide much guidance to the specific factors that examiners actually take into account when appraising a loan. Indeed, there is no standard list of "check points" or rules of thumb for examiners. The basic considerations, however, have been stated in published remarks by examination officers and have been confirmed in discussions with examiners.

A vice-president of the Federal Reserve Bank of Cleveland has submitted the following (among others) as features of credit files that may put an examiner on guard: poor financial ratios; receivables that include bad accounts; excessive advertising and investment in unprofitable subsidiaries; excessive loans to officers, etc.; excessive expenses; falling sales or continual operating losses; excessive withdrawals or dividends; and uninsured losses.[5] The character of the above list of weaknesses and the fact that loans are evaluated individually suggest that loan classification is primarily an appraisal of the borrowers.

Some statistical evidence of this is provided by comparing balance-sheet ratios of borrowers with criticized loans with these ratios for borrowers with noncriticized loans. Virtually all authorities include financial ratios among the principal guides on which approval or rejection of individual loan applications should be based.[6] Indeed, the National Association of Bank Loan Officers and Credit Men (more generally known as the Robert Morris Associates) solicits from its members every year the balance sheets of representative borrowers, and combines these into composite balance sheets expressed in ratio form.[7] These averages are furnished to the Associates for use as yardsticks to appraise the soundness of loans on the books or of new applicants.[8]

[5] Paul C. Stetzelberger, "An Examiner Considers a Loan Account," *Bulletin of the Robert Morris Associates*, May 1954, p. 302.

[6] See, for example, Roger F. Murray, "Evaluating Creditworthiness," and N. H. Moyses, "The Financing of Intermediates," in Benjamin Haggot Beckhart (ed.), *Business Loans of American Commercial Banks*, New York, 1959, pp. 77 and 183; Roland I. Robinson, *The Management of Bank Funds*, New York, 1951, p. 138; Neil H. Jacoby and J. Fred Weston, "Factors Influencing Managerial Decisions in Determining Forms of Business Financing: An Exploratory Study," in *Conference on Research in Business Finance*, New York, National Bureau of Economic Research, 1952, p. 171; Edward F. Gee, "Simplified Credit Analysis for Smaller Banks," *Bulletin of the Robert Morris Associates*, May 1947, p. 411, for a banker's point of view; and Stetzelberger in *Bulletin of the Robert Morris Associates*, May 1954, p. 297, for an examiner's point of view.

[7] Robert Morris Associates, *What It Is and What It Does*, Camden, 1953, p. 7.

[8] There is also statistical evidence that financial ratios are effective indicators of risk. For business borrowers, Charles Merwin (*Financing Small Corporations in Five Manufacturing Industries, 1926-36*, New York, NBER, 1942, p. 99) found that firms that eventually discontinued business in 1932-36 generally had below-average financial ratios as much as six years earlier. As early as 1926, firms that were eventually to discontinue business during 1932-36 had lower-than-average financial ratios; moreover, the differential in ratios between such firms and surviving firms widened during the intervening years. The study is summarized briefly in the report of Moore, Atkinson, and Kilberg (*in Financing Small Business*, p. 64).

In their examination of Reconstruction Finance Corporation lending experience, Raymond J. Saulnier, Harold G. Halcrow, and Neil H. Jacoby (*Federal Lending and Loan Insurance*, Princeton for NBER, 1958, p. 458) found the incidence of defaults and losses to be higher among borrowers with poor financial ratios at the time of their loan application. (The RFC data are also summarized in the report of Moore, Atkinson, and Kilberg in *Financing Small Business*, pp. 63-65.)

Three ratios were calculated for all borrowers for which balance-sheet data were recorded on the examiners' loan cards: the current ratio, the working-capital ratio, and the worth-debt ratio. The current ratio is defined as current assets divided by current liabilities; the working-capital ratio as current assets minus current liabilities, expressed as a proportion of total assets; and the worth-debt ratio as net worth divided by total liabilities. For each of these, the higher the ratio (other things equal), the stronger is the firm's financial condition.[9] In Table 2, the average ratios for various groups of borrowers, cross-classified by industry and size, are compared for loans that were and loans that were not criticized. As the table shows, borrowers whose loans were criticized had lower current ratios, on the average, than other borrowers in nineteen out of twenty-one cells for which such a comparison is possible; they had lower working-capital ratios in twenty out of twenty-one cases; and they had lower worth-debt ratios in twelve out of nineteen cases. Two of the seven instances in which criticized borrowers had higher worth-debt ratios occurred in the finance industry, in which these ratios are typically low. In that industry, a principal test of good management is the extent of "leverage" obtained on the invested capital; an unusually high worth-debt ratio thus would be regarded as an indication that, for one reason or another, the firm was not making efficient use of its capital.[10]

The results confirm that examiners give heavy weight to the condition of individual borrowers in their loan evaluations. Nevertheless, factors other than borrower "quality" must enter into examiner appraisals at least occasionally, since the ultimate objective of the examination process is the soundness of the bank as a whole. Loans are appraised also in the light of the bank's capital position, the composition of its assets, and the nature and variability of its deposit liabilities.

[9] For the reasons for choosing these ratios and certain technical factors in their interpretation, see my unpublished Ph.D. dissertation, "Changes in the Quality of Business Loans of Commercial Banks," Columbia University, December 1960, appendix to Chapter V. In particular, it is shown that financial ratios are not comparable for borrowers of different industries or sizes. See also *Financing Small Business*, p. 55.

[10] See Moyses and Drake, in Beckhart, *Business Loans*, pp. 178 and 152 (footnote). The different significance of worth-debt ratios for finance companies from that for most other businesses provides just one example of the importance of disaggregating industries when analyzing financial ratios. If the worth-debt ratio analysis had been limited to the "all industries" entry in the table, the comparison would have had to be regarded as inconclusive, precisely because that aggregate is substantially influenced by the results for finance companies.

TABLE 2

AVERAGE FINANCIAL RATIOS OF BORROWERS, FOR CRITICIZED AND UNCRITICIZED LOANS, BY INDUSTRY AND SIZE OF BORROWER, 1957[a]

Industry	*Size of Firm*	*Current Ratio*		*Working-Capital Ratio*		*Worth-Debt Ratio*	
		U	C	U	C	U	C
Durable goods manufacturing	L	2.58	1.84	.277	.253	0.54	0.65
	M	2.40	1.75	.307	.173	0.54	0.41
	S	2.07	1.41	.294	.146	0.45	0.33
Nondurable goods manufacturing	L	3.03	1.44	.338	.144	0.50	0.46
	M	2.19	1.86	.312	.255	0.45	0.31
	S	2.04	1.32	.306	.062	0.41	0.41
Retail trade	L	2.54	1.61	.346	.139	0.82	0.52
	M	2.21	1.67	.280	.178	0.63	0.40
	S	2.03	2.46	.262	.181	0.56	1.11
Services	L	1.70	0.10	.125	—.146	0.40	0.31
	M	1.65	0.89	.108	—.030	0.65	0.52
	S	1.77	1.05	—.009	—.439	1.53	1.83
Construction	L	1.43	1.60	.143	.193	0.34	0.13
	M	1.60	1.07	.054	.019	0.51	0.42
	S	1.48	b	.204	b	0.74	b
Wholesale trade	L	1.98	1.54	.320	.255	0.61	0.41
	M	1.83	1.09	.331	.046	0.39	0.78
	S	2.11	1.72	.331	.220	0.61	0.52
Finance[c]	L	1.66	1.26	.100	—.028	0.22[d]	b,d
	M	1.48	0.80	.037	—.014	0.18[d]	2.12[d]
	S	1.75	1.19	.241	.073	0.20[d]	0.26[d]
Utilities	L	1.06	b	.001	b	n.a.	n.a.
	M	1.07	0.48	—.090	—.240	n.a.	n.a.
	S	b	0.16	b	—.581	n.a.	n.a.
All industries	L	2.08	1.46	.215	.089	0.48	0.51
	M	1.92	1.38	.208	.098	0.51	0.44
	S	2.03	1.48	.292	.116	0.46	0.44
	All sizes	1.98	1.42	.239	.096	0.48	0.45

NOTE: L = large, M = medium, S = small, U = uncriticized, C = criticized. For definitions of industry and size classifications, see Appendix. Ratios are simple averages of ratios for individual borrowers. The ratios for all borrowers (criticized and uncriticized) taken together are almost identical with those for uncriticized borrowers.

SOURCE: Bank Examination Survey.

[a] When 1957 data were not available, 1956 data were used.

[b] No data in this cell.

[c] Includes sales finance companies, real estate firms, and commodity dealers.

[d] Sales finance companies only.

"Individual loans may be sound, but risk inherent in large lines, concentrations of credit to the same or related interests, industry, or collateral, must be considered."[11] "In all instances, the objective is to appraise the nature and degree of risk in the assets . . . and relate the total exposure to the capital account, earning power, and managerial capacity."[12] It is possible, therefore, that a loan regarded as sound for one bank might be considered unsound for another, depending on such factors as the size of the loan in relation to the bank's capital and the amount of similar loans the bank might have on its books. However, instances in which loans are criticized for such reasons are probably relatively few. Moreover, by the same type of reasoning, some loans in which the risk of nonpayment appeared high might not be criticized because the collateral or endorsement provided the lending bank with virtually ironclad protection against ultimate loss.

A further reason for examiner criticism that may not be related to the "quality" of the borrower is lack of adequate information about the loan in the bank's credit files. Such loans are often "specially mentioned" rather than actually criticized, but there are probably also cases in which they incur outright criticism. Although such loans may in fact be more prone to default than the average, the incidence of criticism may still be somewhat higher than default experience alone would warrant. All in all, however, even though no quantitative measurement is possible, it is probably fair to state that the focus in loan evaluation is predominantly on the soundness of the borrower.

Of course, a bank might possibly be compensated for the undue risk in a criticized loan by a particularly high interest rate. Indeed, if not for other influences at work, the level of rates and the size of rate differentials might perhaps be regarded as indexes of loan quality. In actuality, however, the adjustment of interest charges to changes in risk conditions, whether cyclical or longer-run, takes place very sluggishly. Moreover, as a general rule, an examiner's appraisal of the quality of a loan is not influenced by the interest rate. Thus, examiner criticism rates provide a useful independent measure of fluctuations in the soundness of the banking system and, as the other side of the coin, in the degree of strain on the business financial structure.

[11] *Manual of Instructions for the Preparation of Reports of Examination,* Federal Reserve Bank of Richmond, Examination Department, April 1951, Appendix.

[12] *Patman Hearings,* reply by Alfred H. Williams, president of the Federal Reserve Bank of Philadelphia, p. 829.

Do examiners really succeed in picking out the risky loans? Is the incidence of default or loss, especially during a business recession, actually higher on loans that were previously criticized than on uncriticized loans? It had been hoped to check these points directly from the examiners' reports, but the project was not feasible within the resources available to this study. Furthermore, there are basic difficulties involved which arise because banks are expected to take remedial action of one sort or another when a particular loan is criticized. Ordinarily, the examiner is able to obtain "the agreement of the bank's management as to the appropriateness of the classification."[13] The outcome presumably is that the loan may be collected or recast on some sounder footing (for example, additional collateral may be secured), and potential default forestalled. Furthermore, even when no such action is taken, the efficiency of the examiners cannot be evaluated merely from the frequency of defaults or losses among criticized loans; allowance must be made for the differences in timing and cyclical influences to which loans made to different borrowers at different times and places are subject.

To be conclusive, therefore, a test of examiner efficiency would have to rely on a case study. Loans incurring criticism would have to be traced until their termination, with or without default or loss; loans eventuating in default or loss would have to be traced back to determine whether they had previously been criticized. As already indicated, resources were not available to undertake this task.

It was possible, however, to test the relation of the incidence of examiner criticism to the incidence of losses on loans on a bank-by-bank basis (as opposed to the loan-by-loan case-study method). This test yielded significantly positive results.

Fifty-six of the banks in the survey were ranked according to the incidence of substandard loans in their portfolios during 1947-57, and this ranking was compared with a similar ranking based on actual gross charge-offs.[14] The entire period 1947-57 was used, first, to take in as

[13] *Patman Hearings*, reply by President Allan Sproul, Federal Reserve Bank of New York, p. 828.

[14] Loans classified "doubtful" or "loss" were excluded from the criticism rate because many of them might be cases in which criticism reflected the fact that default had already occurred, without any prior warning from the examiners. These clearly are not instances that should be scored as "successes" for the examiners. Four banks were omitted because of total or substantial absence of the required data.

many losses as possible (since losses were quite rare), and, second, to maximize the probability that all the banks would have experienced substantial cyclical swings in local business conditions. Such a test is not "fair" to the examiners for several reasons. The banks are not necessarily uniform in their cyclical experience: some regional differentials in cyclical fortunes may well have prevailed for the period viewed as a whole. Still further, we have data only for losses actually charged off and not for temporary defaults or "delinquencies" which presumably occur much more frequently and would therefore provide a statistically more reliable measure of lending experience. Finally, there is the fact that criticized loans consist primarily of business loans, while the loss data are available only for total loans.

The correlations actually found were low, but significant at the 1 per cent level by a wide margin. When the criticism rate for each bank was expressed as the ratio of substandard loans to total loans, the (Kendall) coefficient of correlation was 0.23; when it was expressed as the ratio of substandard loans to business rather than all loans, the

TABLE 3

FREQUENCY DISTRIBUTION OF FIFTY-SIX BANKS RANKED ACCORDING TO EXAMINER CRITICISM RATE AND LOAN LOSS RATE FOR 1947-57
(number of banks)

Ranked According to Loss Rate	*Ranked According to Criticism Rate*		
	Lowest Third	Middle Third	Highest Third
Lowest third	10	6	2
Middle third	3	8	8
Highest third	5	5	9
Average criticism rate (per cent)	0.12	0.69	2.24
Average loss rate (per cent)	0.12	0.12	0.21

NOTE: Lowest third corresponds to ranks 1-18, middle to 19-37, highest to 38-56. All rates are based on total (rather than business) loans. Criticism rate refers to substandard loans only, and excludes loans classified "doubtful" or "loss."

SOURCE: Bank Examination Survey.

coefficient was 0.22.[15] The extent of correlation may be judged from Table 3, which divides the banks into nine groups, each corresponding to a high, middle, or low criticism rate and loss rate, respectively. If the correlation were perfect, all banks would be found on the principal diagonal. When the same table was constructed on a quartile basis, little of the relationship remained visible.

This concludes our introductory survey of the bank examination data. The more detailed findings presented in the ensuing chapters, it is believed, confirm the initial impression that here is a consistent and meaningful set of data of potentially great value for the analysis of financial practices and business fluctuations.

[15] This and all subsequent rank correlations employed in the study were obtained by methods described in Maurice G. Kendall, *Rank Correlation Methods,* New York, 1955, Chapters 1, 3, 4, and 6.